

ET Docket No. 15-26

# Auto Industry Discussion of Vehicular Radar Applications in the 76-81 and 24 GHz Bands

June 23, 2016

# The FCC Should Allow Vehicular Radars to Operate under Part 95 (License-By-Rule) in the 76-81 GHz Band

- **New vehicle safety applications.** Permitting vehicular radar in the 76-81 GHz band will enable manufacturers to further develop and deploy short-range radar (SRR) for safety applications such as autonomous braking, collision warning, lane departure warning and blind spot detection.
- **Band well-suited for vehicular radar.** The 76-81 GHz band enables more effective SRR signals by allowing for a higher concentration of transmitters with limited range.
- **Compatibility with existing users.** Vehicular radar will not interfere with existing services operating in the 76-81 GHz band.
- **Part 95 License-by-Rule.** Vehicular radar systems are used in critical safety-of-life applications and need primary (protection from interference) licensed status; individual licensing is not necessary.

# Concerns With Fixed Infrastructure Radar

- Fixed radar poses an unacceptable risk of interference to vehicular radar systems, which are essential to critical automotive safety applications.
- The NPRM's proposal to allow fixed radar in the 76-81 GHz band ignores differences (*e.g.*, signal pattern, occupied bandwidth and antenna characteristics) in the physical characteristics of fixed and vehicular radar that could make the two generally incompatible.
- Fixed radar interference will reduce the detection range of vehicular radar.
- Fixed radar proponents have not shown (through the ITU or other fora) that they can coexist with other 76-81 GHz operations.
- CEPT is conducting additional testing of vehicular and fixed radar. The FCC should not allow fixed radar in the 76-81 GHz band until such testing is completed.

# 24 GHz Vehicular Radar Equipment Certification

- The FCC should not phase out any 24 GHz vehicular radar equipment certifications, whether narrowband, wideband or ultra-wideband.
- The FCC should clarify that no phase-out will apply to vehicular radar equipment certified under sections 15.245 and 15.249.

# Problems with Proposed Sunset of New 24 GHz Vehicular Radar Equipment Certifications

- Prohibition on future 24 GHz certifications of vehicular radar would deprive OEMs of needed flexibility.
- Such a sunset would stymie the improvement of existing 24 GHz vehicular radar systems.
- Flexibility to use either the 24 GHz or 76-81 GHz bands for vehicular radar would facilitate development and deployment of new technologies and promote competition without compromising the future usefulness of the 24 GHz band.